What is claimed is:

1. A semiconductor device comprising:

a semiconductor layer over an insulating surface:

a gate insulating film on said semiconductor layer: and

a gate electrode on said gate insulating film.

wherein said semiconductor layer comprises a channel formation region, at least one LDD region in contact with said channel formation region, and a source region or a drain region in contact with said LDD region.

wherein said gate electrode has a taper shape. and

wherein said gate electrode comprises a laminate of a fourth electrode. a fifth electrode and a sixth electrode.

2. A semiconductor device comprising:

a semiconductor layer over an insulating surface:

a gate insulating film on said semiconductor layer: and

a gate electrode on said gate insulating film.

wherein said semiconductor layer comprises a channel formation region, at least one LDD region in contact with said channel formation region, and one of a source region and a drain region in contact with said LDD region.

wherein said LDD region comprises a impurity region for giving one conductivity at a concentration of 1×10^{17} to 1×10^{20} /cm^3. and one of said source region and said drain region comprises said impurity element at a concentration of 1 x 1020 to 1×10^{21} /cm^3

wherein said gate electrode has a taper shape. and

wherein said gate electrode comprises a laminate of a fourth electrode, a fifth electrode and a sixth electrode.

3. The semiconductor device as claimed in claim 1, wherein said fourth electrode is formed of a conductive film comprising tungsten or a material including tungsten as its main component, said fifth electrode is formed of a conductive film comprising aluminum or a material including aluminum as its main component, and said sixth electrode is formed of a conductive film comprising titanium or a material including titanium as its main component.

4. The semiconductor device as claimed in claim 2, wherein said fourth electrode is formed of a conductive film comprising tungsten or a material including tungsten as its main component, said fifth electrode is formed of a conductive film comprising aluminum or a material including aluminum as its main component, and said sixth electrode is formed of a conductive film comprising titanium or a material including titanium as its main component.

5. The semiconductor device as claimed in claim 1, said fourth electrode is overlapped with said LDD region through said gate insulating film.

6. The semiconductor device as claimed in claim 2, said fourth electrode is overlapped with said LDD region through said gate insulating film.

7. A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer on an insulating surface;

forming a gate insulating film on said semiconductor layer;

forming a first conductive film, a second conductive film, and a third conductive film in said gate insulating film;

etching said first conductive film, said second conductive film, and said third conductive film to thereby form a first gate electrode comprising a first electrode, a second electrode and a third electrode;

doping an n-type impurity element into said semiconductor layer in a self-aligned manner with said first gate electrode as a mask;

etching said first electrode, said second electrode, and said third electrode to thereby form a second gate electrode comprising a fourth electrode, a fifth electrode and a sixth electrode; and

doping an n-type impurity element into said semiconductor layer with said second gate electrode as a mask.

8. A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer on an insulating surface;

forming a gate insulating film on said semiconductor layer;

forming a first conductive film, a second conductive film, and a third conductive film in said gate insulating film;

etching said first conductive film, said second conductive film, and said third conductive film to thereby form a first gate electrode comprising a first electrode, a second electrode and a third electrode;

doping an n-type impurity element into said semiconductor layer in a

self-aligned manner with said first gate electrode as a mask to form a n-type impurity region (A);

etching said first electrode, said second electrode, and said third electrode to thereby form a second gate electrode comprising a fourth electrode, a fifth electrode and a sixth electrode; and

doping an n-type impurity element into said semiconductor layer with said second gate electrode as a mask to form n-type impurity region (B).

9. A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer on an insulating surface;

forming a gate insulating film on said semiconductor layer;

forming a first conductive film, a second conductive film, and a third conductive film in said gate insulating film;

etching said first conductive film, said second conductive film, and said third conductive film to thereby form a first gate electrode comprising a first electrode, a second electrode and a third electrode;

doping an n-type impurity element into said semiconductor layer in a self-aligned manner with said first gate electrode as a mask to form a n-type impurity region (A) comprising said n-type impurity element at a concentration of 1×10^{20} to 1×10^{22} /cm^3;

etching said first electrode, said second electrode, and said third electrode to thereby form a second gate electrode comprising a fourth electrode, a fifth electrode and a sixth electrode; and

doping an n-type impurity element into said semiconductor layer with

said second gate electrode as a mask to form n-type impurity region (B) comprising said n-type impurity element at a concentration of 1 x 10^{17} to 1 x 10^{20} /cm^3.

10. The method of fabricating a semiconductor device as claimed in claim 7, wherein said first conductive film is a conductive film comprising W or a material including W as its main component, said second conductive film is a conductive film comprising Al or a material including Al as its main component and said third conductive film is a conductive film comprising Ti or a material including Ti as its main component.

11. The method of fabricating a semiconductor device as claimed in claim 8, wherein said first conductive film is a conductive film comprising W or a material including W as its main component, said second conductive film is a conductive film comprising Al or a material including Al as its main component and said third conductive film is a conductive film comprising Ti or a material including Ti as its main component.

12. The method of fabricating a semiconductor device as claimed in claim 9, wherein said first conductive film is a conductive film comprising W or a material including W as its main component, said second conductive film is a conductive film comprising Al or a material including Al as its main component and said third conductive film is a conductive film comprising Ti or a material including Ti as its main component.

13. The method of fabricating a semiconductor device as claimed in claim 7, wherein an impurity is doped into said semiconductor layer through said fourth electrode and said gate insulating film.

14. The method of fabricating a semiconductor device as claimed in claim 8, wherein an impurity is doped into said semiconductor layer through said fourth electrode and said gate insulating film.

15. The method of fabricating a semiconductor device as claimed in claim 9, wherein an impurity is doped into said semiconductor layer through said fourth electrode and said gate insulating film.

16. The method of fabricating a semiconductor device as claimed claim 7, wherein said semiconductor layer is formed by irradiating laser onto an amorphous semiconductor film formed on an insulating film.

17. The method of fabricating a semiconductor device as claimed claim 8, wherein said semiconductor layer is formed by irradiating laser onto an amorphous semiconductor film formed on an insulating film.

18. The method of fabricating a semiconductor device as claimed claim 9, wherein said semiconductor layer is formed by irradiating laser onto an amorphous semiconductor film formed on an insulating film.

19. The method of fabricating a semiconductor device as claimed in claim 7, wherein said semiconductor layer is formed by doping a metal element for promoting crystallization into an amorphous semiconductor film formed on an insulating surface, and then applying a thermal treatment thereto.

20. The method of fabricating a semiconductor device as claimed in claim 8, wherein said semiconductor layer is formed by doping a metal element for promoting crystallization into an amorphous semiconductor film formed on an insulating surface, and then applying a thermal treatment thereto.

21. The method of fabricating a semiconductor device as claimed in claim 9, wherein said semiconductor layer is formed by doping a metal element for promoting crystallization into an amorphous semiconductor film formed on an insulating surface, and then applying a thermal treatment thereto.

22. The method of fabricating a semiconductor device as claimed in claim 19, wherein said metal element is at least one element selected from the group consisting of iron (Fe), nickel (Ni), cobalt (Co), ruthenium (Ru), rhodium (Rh), palladium (Pd), osmium (Os), iridium (Ir), platinum (Pt), copper (Cu), and gold (Au).

23. The method of fabricating a semiconductor device as claimed in claim 20, wherein said metal element is at least one element selected from the group consisting of iron (Fe), nickel (Ni), cobalt (Co), ruthenium (Ru), rhodium (Rh), palladium (Pd), osmium (Os), iridium (Ir), platinum (Pt), copper (Cu), and gold (Au).

24. The method of fabricating a semiconductor device as claimed in claim 21, wherein said metal element is at least one element selected from the group consisting of iron (Fe), nickel (Ni), cobalt (Co), ruthenium (Ru), rhodium (Rh), palladium (Pd), osmium (Os), iridium (Ir), platinum (Pt), copper (Cu), and gold (Au).

25. The semiconductor device as claimed in claim 1, wherein said semiconductor device is selected from the group consisting of a computer, a video camera, a digital camera, a mobile telephone, and a projector.

26. The semiconductor device as claimed in claim 2, wherein said semiconductor device is selected from the group consisting of a computer, a video camera, a digital camera, a mobile telephone, and a projector.